

# **Pollution Prevention for Lead in Arizona**

## **Background**

Lead is a heavy metal solid that is bluish-gray in color without odor. It has been around civilization since ancient times. It is a major component of many alloys, such as bronze and solder. The most common source of poisoning is lead-based paint used in housing before 1978. Soil contaminated by automobile exhaust or by industries that produce lead also can cause poisoning if eaten. Other sources include leaded solder and plumbing fixtures, lead glazed pottery, leaded crystal, lead in imported crayons, bulk water tanks, wrappers of some Mexican candies, some plastic miniblinds and two folk remedy powders.

## **Environmental Health Effects**

Toxic routes of exposure to lead are through food, water and air. It is an acute or chronic toxicant depending upon the mode and nature of exposure. Ingestion of lead paint chips by children is a common cause of lead poisoning.

Lead adversely affects numerous body systems and causes forms of health impairment and disease that arise after periods of exposure as short as days or as long as several years. Long-term overexposure to lead may result in severe damage to the blood-forming, nervous, urinary and reproductive systems. Damage to the central nervous system and the brain are some of the most severe forms of lead poisoning.

## **Pollution Prevention (P2)**

The objective of pollution prevention planning is to reduce the use of toxic substances at the source, minimize the generation of hazardous wastes, and prevent the release of pollutants to the environment. P2 activities include toxics use reduction, source reduction, recycling, waste minimization, reuse, reclamation, conservation, and substitution. P2 provides improved environmental protection, lower waste handling treatment and disposal costs, raw material and energy conservation savings, reduced liability, a safer and cleaner work place, and improved regulatory compliance. Lead poisoning can be prevented through pollution prevention activities.

## **Pollution Prevention Examples**

Remove all lead based paint or use a permanent barrier to eliminate chips.

Use lead-free solder and plumbing fixtures.

Use lead-free paint.

Eliminate lead in wastewater by dry mopping areas with metal chips.

To protect your family, have home repairs and renovations done by workers trained in lead

abatement.

Recycle all lead acid batteries.

## **Resources**

### **EPA' s Safe Drinking Water Hotline**

Call 1-800-426-4791 for information on laboratories certified to test for lead in water and for filter information.

### **Arizona Division of Occupational Safety and Health (ADOSH)**

For information on respirators and protective clothing or working with lead. They can also provide workplace safety and health assistance.

### **National Lead Information Clearinghouse**

Call 1-800-424-LEAD for a list of laboratories that can analyze paint and dust for lead and for the pamphlet Lead Poisoning and Your Children, and other pamphlets (in English and Spanish).

### **Community Right-to-Know Hotline**

Call the EPCRA hotline at 1-800-535-0202 with questions about the Toxic Chemical Release Inventory Report (Form R).

### **Arizona Department of Health Services**

Call 602-230-5943 for information on leaded paint and lead poisoning (ADHS also has a Childhood Lead Prevention Team).

### **ADEQ Hazardous Waste Complaints**

For complaints about lead contaminated soil, call the ADEQ Hazardous Waste Section at 602-207-4152.

The ADEQ Pollution Prevention Unit maintains the Arizona Toxic Chemical Release Inventory (TRI) submitted by facilities in response to the Community Right-to-Know Act, Section 313. Pollution Prevention Plans are also required from large hazardous waste generator and toxic substance users. These Plans are on file at ADEQ for review.

A Clearinghouse of information on lead and other pollution prevention information is also available at ADEQ.